

REMARKS

Responsive to the Office Action mailed August 1, 2007, the present Reply and Amendment is timely filed on or before November 1, 2007. By paper mailed May 10, 2007. Applicants elected without traverse to prosecute the claims of Group I. By the present paper, no claims are cancelled and claims 5 and 38 are amended. Accordingly, claims 1 - 14, 37, and 38 are under examination.

Entry of the amendments and reconsideration of the Application are respectfully requested.

The Claim Amendments

Claim 5 is amended to point out with even greater particularity that the composition comprises 0.01% to about 0.4% tyrosine, by weight, without regard to the source and similarly that the amount of phenylalanine is up to 3% by weight. Applicants respectfully submit that support for the amendments is found, for example, in the claims as filed.

Claim 38 is amended to correct an obvious typographical error and to point-out with even greater particularity that the improvement resides in limitation of tyrosine content.

Applicants respectfully submit that the claim amendments do not introduce new matter into the Application.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claim 5 was rejected because, it is alleged, the upper point of the range of phenylalanine concentration is unclear. Applicants respectfully submit that the present amendments to claim 5 render the rejection moot.

Claim 5 was also rejected because, it is alleged, the actual amount of tyrosine and phenylalanine from all sources is unclear. Applicants respectfully submit that the present amendments to claim 5 remove any such infirmity that may have existed.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1-4, 10-12, and 37 were rejected as allegedly anticipated by Morris et al., published United States Patent Application 2001/0014442 ("Morris et al.'). Because Morris et al. does not teach all of the numerical limitations of Applicants' claims with the required specificity, Applicants respectfully traverse.

Morris et al. discloses a consumable product, especially for cats and dogs, which contains tyrosine. The amount of tyrosine disclosed by Morris et al. varies from 0.05% to 3% (Morris et al., [0033]). On the other hand, Applicants' claims recite an amount of tyrosine from near nil to at most about 0.4%.

The disclosure of a range is no more a disclosure of the end points than it is a disclosure of each intermediate point. To anticipate, a disclosed range must teach the claimed range with sufficient specificity. M.P.E.P. § 2131.03(II). Applicants' claimed range of tyrosine concentration fits into the disclosed range more than *seven times over*. The broad range disclosed by Morris et al. cannot be said to teach Applicants' narrow range that is nestled-away at a remote end of the disclosed range and that is surprisingly important for appetite and weight control.

Because Morris et al. does not disclose the narrow range of tyrosine concentration recited in independent claims 1 and 37 with sufficient specificity, Applicants respectfully submit that the rejection of these claims is improper and should be withdrawn. Claims 2, 3, 4, 10, 11, and 12 depend directly or indirectly from claim 1 and introduce still further limitations not taught by Morris

et al. Accordingly, Applicants respectfully submit that the rejection of these claims is improper and should be withdrawn. See M.P.E.P. § 2131 (citing, *i.a.*, *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) and *In re Bond*, 910, F.2d 831 (Fed. Cir. 1990)).

Claim Rejections Under 35 U.S.C. § 103

Claims 1-14, 37, and 38 (all claims under examination) were rejected as allegedly obvious over Morris et al., *supra*, in view of Gerth et al., United States Patent 5,925,377 (“Gerth et al.”), and further in view of Nagaoka et al., *J. Nutr.* 1990 Oct;120(10):1134-9 (“Nagaoka et al.”). In response, Applicants respectfully submit that the Office misapplies the law of obviousness of ranges. For this reason and further because at least one reference relied on teaches away from the specific numerical limitations of Applicants’ claims, Applicants respectfully traverse.

Morris et al. discloses a food product or consumable product that can contain anywhere from 0.05% to 3% by weight tyrosine, with 1% to 3% being preferred (Morris et al., [0034]).

Gerth et al. teaches a dietary supplement that can contain tyrosine and teaches that tyrosine in *combination with* phenylalanine may assist appetite and weight control (Gerth et al., abstract).

Nagaoka et al. discloses that excess dietary tyrosine can result in increased serum cholesterol. As far as Applicants are aware, Nagaoka et al. is silent concerning the effect of tyrosine on appetite regulation and weight control and the Office has not pointed to any such teaching in Nagaoka et al. Indeed, Example 1 of the cited reference indicates that the food intake of rats fed an excess of tyrosine diet was no different from that of rats fed a control diet (Nagaoka et al. at 1136).

Applicants’ claims are drawn to an edible composition comprising up to a maximum of 0.4% tyrosine and, in certain embodiments, up to 3% phenylalanine. Applicants respectfully submit that none of the references alone teach Applicants’ specific limitation on the amount of tyrosine.

The Office apparently agrees and asserts that Applicants' specific upper limitation on tyrosine concentration (0.4%), and other numerical claim limitations, are merely the result of non-inventive routine optimization. However, as the Office acknowledges, optimization of a variable (e.g. concentration) is routine optimization *only* if the variable is *recognized* as result effective (Applicants' emphasis). See M.P.E.P. § 2144.05(II)(B). But in this case, the Office does not point to anything in the prior art recognizing tyrosine concentration, or minimization thereof, as a result effective for appetite suppression or weight control. The Office supports the rejection with a single sweeping conclusory statement: "[h]owever, the amount of a specific ingredient in a composition is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize" (Office Action at pg. 6).

As Applicants best understand this argument, the Office takes the position that mere disclosure of something as a specific ingredient of a composition automatically renders *any* limitation to the amount of that ingredient always and every way *ipso facto* obvious as the result of routine optimization. Applicants respectfully submit that this position effectively wipes out the requirement that a variable first be recognized as result effective before optimization of that variable can be obvious and is tantamount to overruling, by administrative action, *In re Antoine*, 559 F.2d 618 (C.C.P.A. 1977), and its progeny. For this reason alone, Applicants respectfully submit that the rejection is improper and should be withdrawn.

Applicants do not base their traversal on the above ground alone, however. Prior art must be considered in its entirety, including disclosures that teach away from the claims. M.P.E.P. § 2141.02(VI). Applicants respectfully submit that the skilled artisan of the day, reading Gerth et al. as a whole would conclude that Gerth et al. urges the use of relatively higher amounts of tyrosine.

The only tyrosine-containing compositions expressly disclosed by Gerth et al. contain *ca.* 13% tyrosine (Gerth et al., column 3, line 18). In addition, according to Gerth et al., in order to act as an appetite suppressant, DL-phenylalanine must be converted into tyrosine, and effective amounts of phenylalanine are disclosed as being *38.02% by weight*. (Gerth et al., column 2, lines 3-4; column 3, line 16). Thus, given the very large percentages of tyrosine (and phenylalanine) deemed effective, the skilled artisan of the day reading Gerth et al. and seeking to develop an edible composition for appetite regulation or weight control would not have contemplated even experimenting with tyrosine levels as low as 0.4% as claimed - a level *32x lower* than the amount of tyrosine and *95x lower* than the amount of phenylalanine expressly disclosed by Gerth et al. - which level Applicants were the first to discover as key for appetite regulation and weight control.

Nagaoka et al. adds nothing. Nagaoka et al. discloses a relationship between increased dietary tyrosine on serum cholesterol. To the best of Applicants' knowledge, Nagaoka et al. is silent on the connection, if there is any, between excess dietary tyrosine, serum cholesterol and appetite suppression or weight control, and the Office does not point out any such connection. As such, Applicants respectfully submit that Nagaoka et al. neither cures the teaching-away of Gerth et al. nor does it provide the necessary reason why one of skill in the art would be motivated to lower the amount of tyrosine to achieve appetite suppression or reduce food intake in an animal either taken alone or in view of Morris et al. and Gerth et al.

For these additional reasons, Applicants respectfully submit that the rejection is improper and should be withdrawn.

Conclusion

Based on the foregoing amendments and remarks, Applicants respectfully submit that the claims are now in condition for allowance, which allowance is earnestly solicited. If, in the opinion of the Examiner, a telephone conference will advance prosecution of the Application, the Examiner is invited to telephone the undersigned attorney.

Respectfully Submitted,
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